**The impact of Board Characteristics on the level of Voluntary Disclosure: Evidence from Palestinian listed companies**

**Raed Abdelhaq Aladdin Dwekat** 2 **,Sameh Atout** 3  **and Abdulnaser I. Nour** 4[<https://orcid.org/0000-0001-8525-9799>]

1,2,3,4 Accounting department- Faculty of Economics and Social Sciences  
An-Najah National University,  
Nablus, Palestine

1 [raed.abdelhaq@hotmail.com](mailto:raed.abdelhaq@hotmail.com), [2aladdin.dwekat@najah.edu](mailto:2aladdin.dwekat@najah.edu)

3, 4sameh.atout@najah.edu, a.nour@najah.edu

**Abstract**

This study aims to investigate the extent and nature of voluntary disclosure (VD) of the Palestinian companies listed on the Palestine Exchange (PEX). Furthermore, the impact of board characteristics on the level of voluntary disclosure is examined. Data was collected from a sample of 45 companies’ annual reports -constituting 93.7% of Palestinian-listed companies- for 2013-2017. In order to measure VD, a disclosure index including 55 items of voluntary information was constructed and applied. To achieve the study’s objectives, fixed effect multiple regression was used. The study results reveal that, on average, a company discloses 56.31% of the items included in the disclosure index. In addition, a significant positive relationship between board size and the level of voluntary disclosure. In contrast, there is a significant negative relationship between board gender diversity and the level of voluntary disclosure. Furthermore, board independence was found not to affect the level of voluntary disclosure. The study recommends that policymakers and regulators are encouraged to establish an official Palestinian VDI that can be used to evaluate and compare voluntary practice and disclosure among Palestinian companies.

**Keywords:** Voluntary disclosure, Board Characteristics, PEX.

**Introduction**

In today’s business environment, agency and asymmetric information problems remain significant concerns for companies. Various solutions have been proposed to mitigate these problems, with transparency through disclosure and board monitoring [1]. Companies increasingly use voluntary disclosure to communicate with investors [2] and comply with legal and regulatory requirements [3]. In Palestine, legal and regulatory reports and disclosures for public companies listed on the Palestine Stock Exchange (PEX) are expressed through Securities Law No. 12 of 2004, Capital Market Authority Law No. 13 of 2004, and the disclosure System approved by the Palestine Securities Exchange and the Capital Market Authority in 2006. The Code of Corporate Governance in Palestine (2009) requires Palestinian-listed companies to include specific information, such as Board composition and committees, social responsibility policies, and safety regulations in their annual reports.

Voluntary disclosure is becoming increasingly important in today’s capital market. Companies disclose additional information for various reasons, including enhancing their image and reputation [4,5,6], raising capital at a lower cost [7, 8], improving relationships with customers, communities, and governments [9], and reducing information asymmetry and agency costs [10,11,12,13]. Companies that fail to provide adequate disclosure may face difficulties obtaining capital to finance their operations or may incur a higher cost of capital [14].

Despite the importance of voluntary disclosure, there is still a lack of research on its impact on board characteristics in developing countries such as Palestine [15,63]. Therefore, this study aims to fill this literature gap by examining the impact of board characteristics on the level of voluntary disclosure of Palestinian companies listed on PEX from 2013 to 2017. Understanding why companies voluntarily disclose information is beneficial for producers and users of accounting information, as well as accounting policymakers. The study will contribute to the literature on voluntary disclosure and board characteristics in developing countries like Palestine.

**Literature, theoretical framework and developing hypotheses:**

Corporate voluntary disclosure has gained increasing attention as a crucial research area. Companies use voluntary disclosures in annual reports to communicate to market their management ideas and promote their potential to stakeholders [16]. Information plays a vital role in communicating with stakeholders, and from an accounting perspective, it contributes towards the long-term growth and sustainability of companies [16, 17]. Several studies have examined the relationship between corporate governance mechanisms and voluntary disclosure, including board and firm characteristic variables [4, 18, 19, 20, 21, 22].

The board of directors has a crucial role in aligning management concerns with those of stakeholders, minimizing agency costs and information asymmetry [23]. Previous studies have examined board characteristics and their relationship with voluntary disclosure, including board size [4, 24,67], board independence [19, 25], and board gender diversity [26, 27].

Previous studies have explored the extent and nature of voluntary disclosure in Palestinian-listed companies in Palestine. For example, [28] studied the effect of voluntary disclosure on stock prices in Palestinian listed companies in 2014, finding that the average voluntary disclosure was 54%, with the banking sector having the highest voluntary disclosure rate of 70%. Furthermore, [25] explored the critical factors influencing voluntary disclosure in Palestinian-listed companies in 2011 and 2007, finding an average voluntary disclosure of 41.7% in 2011 and 30.8% in 2007. Additionally, [29, 30] examined the extent and nature of CSR reporting in the annual reports of companies listed on the Palestine Exchange (PEX), finding a relatively low level of CSR disclosure in Palestinian corporations.

Various theories explain firms’ voluntary disclosure, including agency, signalling, capital need, and legitimacy theories [1]. The agency theory suggests that firms disclose voluntary information to reduce agency problems, minimize agency costs, and effectively use resources in the shareholders’ best interest [12]. The signalling theory indicates that voluntary information distinguishes a company’s performance from other firms, enhances its reputation, and attracts new investments [31]. The capital need theory posits that companies that disclose more voluntary information can obtain funds at a lower cost [32]. Finally, legitimacy theory explains the incentive of management to disclose information voluntarily because disclosure informs the community about the firm’s work and contribution to society [33,66].

**Board Size**

The board of directors is a critical component of corporate governance, with its primary responsibility being to monitor and control management’s actions [34]. The size of the board is an essential factor that can affect its effectiveness in fulfilling these functions. Larger boards can provide a greater variety of expertise and contribute to strategic decision-making [35]. In addition, larger boards have been found to minimize the likelihood of information asymmetry [36], and promote greater levels of information disclosure [3].

Previous research has consistently shown a positive relationship between board size and voluntary disclosure levels [10,18,24,25,35] Specifically, studies have found that larger boards are associated with higher levels of voluntary disclosure [18,24,25,37]. This relationship can be attributed to larger boards having more diverse expertise and better monitoring and controlling management actions, leading to greater levels of voluntary disclosure. Therefore, based on the previous discussion, the first hypothesis will be as follows:

***H1:*** *There is a significant positive relationship between board size and the level of voluntary disclosure in the annual reports of Palestinian companies listed on PEX.*

**Board independence**

The composition of the board of directors is a crucial aspect of corporate governance. Non-executive directors, who are independent board members and not employed by the firm, have been found to be more effective in maximizing shareholder wealth and improving control over management than insider directors [38]. Non-executive directors can also play a vital role in addressing agency problems and reducing information asymmetry by providing greater voluntary disclosure [39]. Previous research has shown that a greater proportion of independent directors on the board can improve the quality of disclosure and limit the incentives for withholding information [40]. In addition, companies with a higher proportion of non-executive directors have been found to disclose more information to investors, with a positive relationship between the proportion of non-executive directors and the level of voluntary disclosure [3,19, 23, 25]. Therefore, the second hypothesis of this study is:

***H2:*** *There is a significant positive relationship between board independence and the level of voluntary disclosure in the annual reports of Palestinian companies listed on PEX.*

**Board Gender diversity**

The issue of gender diversity has gained significant attention in recent years due to the increasing number of women in top management and on corporate boards [41,42]. Studies have suggested that board gender diversity may impact firms’ disclosure practices in their annual reports [43]. According to agency theory, a more diverse board will likely be more effective in monitoring management actions due to increased independence [44]. In addition, [45] have argued that women directors are particularly influential in monitoring and overseeing the actions of managers. Therefore, it is suggested that a greater representation of women on the board may enhance the board’s commitment to corporate voluntary disclosure practices [46]. However, previous studies have produced mixed results. While some studies, such as [26, 27], found a positive association between gender diversity and voluntary disclosure, others, such as [47,48] indicate a negative association. Based on the above discussion, the third hypothesis of this study is:

***H3:*** *There is a significant positive relationship between board gender and the level of voluntary disclosure in the annual reports of Palestinian companies listed on PEX*.

**3. Methodology**

**3.1. Population and Sample**

This study’s population comprises all companies listed on the Palestine Exchange (PEX) between 2013 and 2017. The sample includes companies that meet two specific criteria: firstly, they must have been listed on the PEX during the stated period, and secondly, all necessary data on the company for that period must be available. As a result of these criteria, the sample comprises 45 companies, with a total of 225 firm-year observations. To gather the required data, this study relies on the

annual reports of the sampled companies, which are publicly accessible on the PEX website.

**3.2 Measurement of Variables**

***The Dependent Variable: Voluntary Disclosure Index***

The dependent variable of this study is the level of voluntary disclosure. To measure voluntary disclosure, previous studies have employed various indices. For this study, a disclosure index was constructed by reviewing prior research such as [19,22,49,50,51], in addition to considering the legal and regulatory requirements for publicly listed companies on the PEX. The disclosure index is composed of 55 items of voluntary information. It is categorized into five types: corporate and strategic information (CSI), financial and capital market data information (FCMI), directors and senior management information (DSMI), forward-looking information (FLI), and corporate social responsibility information (CSRI).

To avoid subjective evaluation, the disclosure score for each firm is additive and unweighted, following Cooke’s approach [52]. The content analysis method examines each annual report and identifies the presence or absence of the disclosure items. The dummy procedure is then applied to compute the voluntary disclosure score for each annual report, assigning a score of one if an item is disclosed and zero if not. The disclosure score for each annual report is calculated by dividing the number of items reported by the firm by the total number of items in the VDI. The average voluntary disclosure for any annual report in a given year is obtained using the following formula:

**VDS = ∑ Points of (CSI, FCMI, DSMI, FLI and CSRI)/55**

***Independent variables***

This study employs three independent variables: board size, board independence, and board gender diversity. Furthermore, four control variables are utilized, including firm size, financial leverage, firm performance, and firm age. Table 1 provides the operational definition of this study’s dependent and independent variables.

**Table 1: The definitions, and proxies, for the dependent, independent and control variables**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Label** | **Operational Definition** | **Reference** |
| Voluntary Disclosure Index | VDI | VDS = ∑ Points of (CSI, FCMI, DSMI, FLI and CSRI)/55 | [22] |
| Board Size | BSIZE | Number of the board of directors | [37, 53, 54] |
| Board independence | BIND | Percentage of independent directors on the board. | [55] |
| Board Gender Diversity | BGED | Percentage of female directors on the board. | [48] |
| Firm Size | FSIZE | The logarithm of the total assets of the firm. | [50,65] |
| Financial Leverage | FLEV | The total debt to total assets. | [19] |
| Firm Profitability | PROF | Return on assets (ROA): Net income / Total Assets. | [3] |
| Firm Age | FAGE | The logarithm of the number of years since the establishment | [50,64] |

**3.3 The Regression Model**

In order to examine the impact of board characteristics on the level of voluntary disclosure in the annual reports of Palestinian companies listed on the Palestine Exchange (PEX) between 2013 and 2017, the following multiple regression model was developed:

The dependent and independent variables and the error term (ε) and regression coefficients (βk), are defined in Table 1.

**4. Result and discussion**

* 1. **Descriptive statistics**

Table 2 displays the results of the descriptive statistics analysis conducted on all study variables, which include the dependent, independent, and control variables. The descriptive analysis provides essential information, such as the mean, standard deviation, maximum value, and minimum value for each variable, aiding in a comprehensive understanding of the data.

**Table 2. descriptive statistics analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Obs | Mean | Std. Dev. | Min | Max |
| VDI | 225 | .563 | .152 | .236 | .873 |
| BSIZE | 225 | 8.764 | 2.149 | 5 | 15 |
| BIND | 225 | .915 | .158 | 0 | 1 |
| BGED | 225 | .058 | .107 | 0 | .571 |
| FSIZE | 225 | 17.622 | 1.767 | 14.01 | 22.308 |
| FAGE | 225 | 3.044 | .553 | 1.099 | 4.277 |
| FLEV | 225 | .413 | .257 | .009 | .947 |
| FPROF | 225 | .026 | .083 | -.622 | .318 |
|  | | | | | |

Table 2 reveals that the average score for voluntary disclosure by companies is 56.31% out of the 55 items included in the VDI. This finding is consistent with prior studies conducted within the Palestinian context. For instance, according to [25], Palestinian companies listed on the PEX disclosed around 41.7% and 30.8% of the VDI items in 2011 and 2007, respectively. Additionally, [28] found that Palestinian companies listed on PEX disclosed approximately 54% of the VDI items.

Moreover, Table 2 highlights that the average number of board members for Palestinian-listed companies on the PEX is around nine. The minimum number of board members is five, while the maximum is 15. However, the corporate governance code for publicly listed companies in Palestine allows for up to 11 members on the board, indicating non-compliance by some companies. Notably, most directors (91.5%) are independent, meaning they do not hold any executive positions within the companies they serve. Additionally, female directors constitute an average of 5.77% of the total board members in the sampled companies, which is relatively low.

* 1. **Normality, multicollinearity, and heteroscedasticity**

Before performing a regression analysis, assessing the data for normality, multicollinearity, and heteroscedasticity is crucial. Normality indicates that the data should have an approximately normal distribution to satisfy statistical assumptions [56]. Multicollinearity occurs when highly correlated predictor variables lead to inconsistent and unreliable results [56]. Lastly, heteroscedasticity refers to the presence of unequal variances in the errors, which can affect the accuracy of the results [56]. Therefore, it is necessary to investigate these issues to ensure the reliability and validity of the regression analysis [56].

The normality of the residuals was evaluated using the Shapiro-Wilk W test, and the results indicate that the p-value of 0.464 was not statistically significant at the 0.05 level (refer to Table 3). Thus, the residuals can be assumed to follow a normal distribution, which is a critical assumption for many statistical analyses. These findings provide support for using parametric statistical methods for the data analysis.

**Table 3. Shapiro-Wilk W test for normal data**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Obs | W | V | Z | Prob>z |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Residuals | 225 | 0.994 | 1.055 | 0.123 | 0.451 | | | | | | |

Pearson’s correlation was used to determine the presence of multicollinearity among the study variables (refer to Table 4). The highest correlation, 0.494, was found between FSIZE. and FAGE and the correlations among the variables were either low or moderate, indicating the absence of multicollinearity.

**Table 4. Correlation matrix**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| (1) VDI | 1.000 |
| (2) BSIZE | 0.080 | 1.000 |
| (3) BIND | 0.206 | 0.069 | 1.000 |
| (4) BGED | 0.006 | -0.217 | -0.061 | 1.000 |
| (5) FSIZE | 0.570 | 0.459 | 0.205 | -0.190 | 1.000 |
| (6) FAGE | 0.001 | -0.010 | -0.059 | 0.095 | -0.024 | 1.000 |
| (7) FLEV | 0.297 | 0.218 | -0.009 | 0.015 | 0.494 | -0.204 | 1.000 |
| (8) FPROF | 0.170 | -0.067 | 0.066 | 0.183 | 0.123 | 0.247 | -0.191 | 1.000 |
|  | | | | | | | | |

Lastly, the Breusch-Pagan / Cook-Weisberg test was utilized to assess the assumption of constant variance in the model and detect heteroscedasticity. The chi-square statistic yielded a value of 1.89; the corresponding p-value was 0.169 (refer to Table 5). These results suggest no significant evidence to reject the null hypothesis of constant variance, indicating no presence of heteroskedasticity.

**Table 5. Breusch-Pagan / Cook-Weisberg test for heteroskedasticity**

|  |
| --- |
| Variables: fitted values of VoluntaryD  chi2(1) = 1.89  Prob > chi2 = 0.1690 |

**4.3 Regression analysis**

**Table 6: regression analysis**

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
| VARIABLES | Pooled OLS | Random Effect | Fixed Effect |
|  |  |  |  |
| BSIZE | 0.0218 | 0.0218 | 0.0940\*\* |
|  | (0.0461) | (0.0461) | (0.0472) |
| BIND | 0.124 | 0.124 | 0.129 |
|  | (0.0986) | (0.0986) | (0.153) |
| BGED | -0.0738 | -0.0738 | -0.269\*\* |
|  | (0.108) | (0.108) | (0.123) |
| FSIZE | 0.0613\*\*\* | 0.0613\*\*\* | 0.106\*\*\* |
|  | (0.0112) | (0.0112) | (0.0231) |
| FAGE | 0.110\*\*\* | 0.110\*\*\* | 0.268\*\*\* |
|  | (0.0273) | (0.0273) | (0.0423) |
| FLEV | -0.0191 | -0.0191 | -0.112\* |
|  | (0.0562) | (0.0562) | (0.0648) |
| FPROF | 0.0677 | 0.0677 | -0.0407 |
|  | (0.0911) | (0.0911) | (0.0885) |
| Constant | -0.975\*\*\* | -0.975\*\*\* | -2.264\*\*\* |
|  | (0.204) | (0.204) | (0.402) |
|  |  |  |  |
| Observations | 225 | 225 | 225 |
| R-squared |  |  | 0.384 |
|  |  |  |  |

Standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Hausman’s test was performed to ascertain whether the fixed or random effects panel regression model was more appropriate prior to estimating the regression models [1]. The results of the Hausman test indicated a p-value of less than 0.05, indicating that the fixed effect model was more suitable for the analysis. Therefore, the regression findings are presented in Table 6, where Model 1 employed Pooled OLS, Model 2 used the random effect model, and Model 3 utilized the fixed effect model.

The regression analysis results presented in Table 6 reveal essential insights into the relationship between board characteristics and voluntary disclosure (VD) practices among Palestinian firms listed on the Palestine Exchange (PEX) from 2013-2017. Therefore, the fixed effect model was the most suitable for the analysis based on the results of Hausman’s test.

The first hypothesis posited that board size is positively related to the level of voluntary disclosure. The results support this hypothesis, as a significant positive relationship between board size and the level of voluntary disclosure was found (β = 0.094, p < 0.01). This indicates that companies with larger boards disclose more voluntary information. This finding is consistent with previous studies [18,25,29,57], which have shown a positive relationship between board size and the level of voluntary disclosure. One possible explanation for the positive relationship between board size and voluntary disclosure is that a larger board provides more diverse perspectives and experiences, which can contribute to developing and implementing effective disclosure practices. This diversity can increase the level of scrutiny applied to decision-making processes, which can promote accountability and transparency.

Additionally, a larger board can provide more resources for monitoring and oversight, which can help ensure that the company is operating ethically and socially responsibly. Companies with larger boards may also be more likely to prioritize stakeholder interests, as they may have a broader range of perspectives and interests represented at the board level. Finally, a larger board may lead to a more comprehensive and meaningful approach to voluntary disclosure.

The second hypothesis tested whether board independence is positively related to the level of voluntary disclosure. The regression analysis results indicate an insignificant relationship between board independence and the level of voluntary disclosure (β = 0.129, p > 0.05). Therefore, this hypothesis is rejected. This result is consistent with previous research [20,49,58], which have shown that non-executive directors in Palestinian firms are not truly independent and may have strong families, business, or friendly relations with executive directors, which influence their independence and weaken their monitoring role.

The third hypothesis aimed to determine whether there is a positive relationship between board gender diversity and the level of voluntary disclosure. However, the study’s results revealed a significant negative relationship between the two variables (β = -0.269, p < 0.01), leading to the rejection of this hypothesis. This unexpected finding raises questions about why board gender diversity could negatively impact voluntary disclosure practices, and more research is required to explore this relationship further. One potential explanation is that female directors may lack sufficient influence or power to shape the board’s strategic direction, hindering their ability to advocate for voluntary disclosure initiatives. This result is consistent with previous studies that have found a negative association between board gender diversity and corporate disclosure [47,59,60]. For instance, [47] suggest that the representation of women on boards in Pakistan is minimal. Meanwhile, according to [60], female directors lack the necessary education and experience to promote CSR reporting practices. Furthermore, in Bangladesh, where most firms are family-owned, there is a negative correlation between the presence of female directors in family businesses and CSRD.

Moreover, the negative relationship between the presence of women on boards and voluntary disclosure in developing countries, such as Palestine, can be attributed to several factors. Firstly, social and cultural norms prevalent in these countries may limit women’s participation in corporate decision-making and board positions. This could lead to tokenism, where women directors are appointed only to fulfil gender diversity quotas without giving them real decision-making power [1]. Furthermore, the critical mass theory suggests that the presence of less than three female members on a board is insufficient to effect change [61]. Secondly, women directors may face obstacles in accessing networks and resources available to their male counterparts, reducing their effectiveness in promoting transparency and disclosure. Thirdly, the limited number of women serving on boards in these countries may make it challenging to draw meaningful conclusions about their influence on voluntary disclosure [60]. Additionally, the lack of diversity among women directors may limit their ability to promote voluntary disclosure, as they may hold similar views and experiences to their male counterparts. Therefore, to fully realize the benefits of diverse perspectives and experiences in promoting voluntary disclosure practices, policymakers and organizations must address these barriers and promote greater gender diversity on boards.

Regarding the control variables, the results show that firm size is positively related to the level of voluntary disclosure (β = 0.106, p < 0.001), consistent with the stakeholder theory argument that larger firms face greater pressure from a larger number of stakeholders to provide more information. Furthermore, the results reveal that firm age is also positively related to the level of voluntary disclosure (β = 0.268, p < 0.001), indicating that new firms disclose more information voluntarily than older ones. This finding is consistent with prior studies [55,62]. Finally, financial leverage is found to have a negative relationship with voluntary disclosure practices (β = -0.112, p < 0.05), which is also consistent with previous research [19,21,58]. This could be due to the higher risk associated with higher financial leverage, which makes firms more cautious about disclosing information voluntarily.

**Conclusion**

In conclusion, this study contributes to the literature by investigating the extent of voluntary disclosure and the impact of board characteristics on the level of VD in the annual reports of Palestinian companies listed on PEX from 2013 to 2017. The findings suggest that the average level of voluntary disclosure in the sampled companies is moderate, with financial and capital market information being the most disclosed category, while forward-looking information is the least disclosed. Additionally, the study identifies board size as a significant and positive factor affecting voluntary disclosure practices, while board gender diversity significantly negatively affects VD. This highlights the importance of considering board characteristics when evaluating the level of voluntary disclosure in Palestinian companies.

Based on the results, the study recommends that policymakers and regulators establish an official Palestinian VDI to evaluate and compare voluntary practice and disclosure among Palestinian companies. Moreover, Palestinian companies need to adhere to the Code of Corporate Governance in Palestine, which emphasizes the importance of board composition and size. Therefore, it could be beneficial for companies to consider increasing the number of board members in order to improve their voluntary disclosure practices. This could be achieved by recruiting more independent directors with diverse skills and expertise who can provide constructive criticism and challenge management decisions. A larger board could also provide more resources and oversight to ensure the company meets its disclosure obligations. In addition, future research could examine the effect of other potential explanatory variables, such as director’s tenure, age, and board committees, on the level of voluntary disclosure.

Concerning board gender diversity, the finding indicates that board gender diversity has a negative impact on voluntary disclosure, suggesting that companies would take steps to ensure that female directors can play an effective role in promoting transparency and disclosure. To do so, companies may consider implementing policies and practices aimed at increasing the participation and influence of women in corporate decision-making, such as mentoring programs or diversity initiatives. Additionally, companies may want to focus on improving the networks and resources available to women directors, which may help to enhance their effectiveness in promoting voluntary disclosure practices. By taking these steps, companies may overcome the barriers that limit the effectiveness of women directors in promoting transparency and disclosure and realize the potential benefits of greater gender diversity on their boards.

However, the study has several limitations. Firstly, using a disclosure index to measure voluntary disclosure levels may limit the comparability of the results with other studies that used different indices. Secondly, the VDI used in the study measures the quantity rather than the quality of voluntary information disclosed, and there is no independent audit to verify the accuracy and reliability of the information. Lastly, the study’s period is limited to only five years, and future studies could extend the period to gather more comprehensive data.

**Contributions/Practical Implications:**

The research makes significant theoretical and empirical contributions to literature regarding the impact of Board Characteristics on the level of Voluntary Disclosure on the Palestineand other countries. The research results might help both managements and practitioners in the corporations to be more ready to understand the components and impact of board characteristics on the level of voluntary disclosure and activity, effectiveness and provide the level of voluntary disclosure insight into developing and applying them within Palestinian-listed companies. The level of voluntary disclosure is an important source for all companies’ wealth and therefore it should be taken into serious consideration when formulating the Palestinian-listed companies’ strategy. This strategy formulation process can be enhanced by fully integrating their indicators into management practices. Palestinian-listed companies should coordinate different perspectives and indicators to improve their performance and should assign scales for each of such Board Characteristics.

**References**

[1] Dwekat, A., Seguí-Mas, E., Zaid, M. A., & Tormo-Carbó, G. (2022a). Corporate governance and corporate social responsibility: mapping the most critical drivers in the board academic literature. Meditari Accountancy Research, 30(6), 1705-1739.

[2] Ho, S., and Wong, K. (2001). A study of the relationship between corporate governance structure and the extent of voluntary disclosure. Journal of International Accounting, Auditing and Taxation, 10(1), 139–156. <http://dx.doi.org/10.1016/S1061-9518(01)00041-6>

[3] Cheng, E., and Courtenay, S. (2006). Board composition, regulatory regime and voluntary disclosure. The International Journal of Accounting, 41(3), 262–289. <http://dx.doi.org/10.1016/j.intacc.2006.07.001>

[4] Dwekat, A., Seguí‐Mas, E., Tormo‐Carbó, G., & Carmona, P. (2020a). Corporate governance configurations and corporate social responsibility disclosure: Qualitative comparative analysis of audit committee and board characteristics. Corporate Social Responsibility and Environmental Management, 27(6), 2879-2892.

[5] Boesso, G., and Kumar, K. (2007). Drivers of corporate voluntary disclosure: A framework and empirical evidence from Italy and the United States. Accounting, Auditing & Accountability Journal, 20(2), 269–296. <http://dx.doi.org/10.1108/09513570710741028>

[6] Siregar, S.V. and Bachtiar, Y. (2010). Corporate Social Reporting: Empirical Evidence from Indonesia Stock Exchange. International Journal of Islamic and Middle Eastern Finance and Management, 3(3), 241-252.

[7] Healy, P. and Palepu, G. (1993), “The Effect of Firms’ Financial Disclosure Strategies on Stock Prices”. Accounting Horizons, 7(March), 1-11.

[8] Collet, P., Hrasky, S. (2005). Voluntary Disclosure of Corporate Governance Practices by Listed Australian Companies. Blackwell Publishing Ltd, Vol. 13, No. 2, pp. 188-199.

[9] Williams, S.M. and Pei, C.A.H.W. (1999). Corporate social disclosures by listed companies on their web sites: An international comparison. The International Journal of Accounting, 34(3), 389-419.

[10] Dwekat, A., Meqbel, R., Seguí‐Mas, E., & Tormo‐Carbó, G. (2022b). The role of the audit committee in enhancing the credibility of CSR disclosure: Evidence from STOXX Europe 600 members. Business Ethics, the Environment & Responsibility, 31(3), 718-740.

[11] Cormier, D., Ledoux, M.-J. and Magnan, M. (2011). The Informational Contribution of Social and Environmental Disclosures for Investors. Management Decision, 49(8), 1276-1304.

[12] Barako, D., Hancock, P., and Izan, H. (2006). Factors influencing voluntary corporate disclosure by Kenyan firms. Corporate Governance: An International Review, 14(2), 107–125. <http://dx.doi.org/10.1111/j.1467-8683.2006.00491>.

[13] Healy, M., and Palepu, G., (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. Journal of Accounting and Economics, 31(1–3), 405–440. <http://dx.doi.org/10.1016/S0165-4101(01)00018-0>.

[14] Singhvi, S., and Desai, H., (1971). An empirical analysis of the quality of corporate financial disclosure. The Accounting Review, 46(1): 120-138.

[15] Garas, S., ElMassah, S. (2018). Corporate governance and corporate social responsibility disclosures: The case of GCC countries. Critical perspectives on international business, 14(1), 2-26.

[16] Abeysekera, I., & Guthrie, J. (2005). An empirical investigation of annual reporting trends of intellectual capital in Sri Lanka. Critical Perspectives on Accounting, 16(3), 151-163. <http://dx.doi.org/10.1016/S1045-2354(03)00059-5>.

[17] Mardawi, Z., [Seguí-Mas, E.](https://www.emerald.com/insight/search?q=Elies%20Segu%C3%AD-Mas) and [Tormo-Carbó, G.](https://www.emerald.com/insight/search?q=Guillermina%20Tormo-Carb%C3%B3) (2023), “Wave after wave: unboxing 40 years of auditing ethics research”, [Meditari Accountancy Research](https://www.emerald.com/insight/publication/issn/2049-372X), Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/MEDAR-05-2022-1698>

[18] Zaid, M.A.A., Wang, M. and Abuhijleh, S.T.F. (2019), “The effect of corporate governance practices on corporate social responsibility disclosure”, Journal of Global Responsibility, Vol. 10 No. 2, pp. 134-160, doi: 10.1108/JGR-10-2018-0053.

[19] Elfeky, M., (2017). The impact of corporate governance on voluntary disclosure in emerging markets: The case of Egypt. Australian Journal of Basic and Applied Sciences, 25-41

[20] Sartawi, I., Hindawi, R., Bsoul, R., and Ali, A. (2014). Board Composition, Firm Characteristics, and Voluntary Disclosure: The Case of Jordanian Firms Listed on the Amman Stock Exchange. International Business Research; Vol. 7, No. 6.

[21] Soliman, M., Ragab, A., and Eldin, M., (2014). Board composition, ownership structure and voluntary disclosure: an empirical study of the listed companies in Egypt. Corporate Ownership & Control, Volume 11, Issue 2.

[22] Ho, P., and Taylor, G., (2013). Corporate governance and different types of voluntary disclosure: Evidence from Malaysian listed firms. Pacific Accounting Review, Vol. 25 Issue: 1, 4-29, http:// doi.org/10.1108/01140581311318940.

[23] Patelli, L., and Prencipe, A. (2007). The relationship between voluntary disclosure and independent directors in the presence of a dominant shareholder. European Accounting Review, 16(1), 5–33. <http://dx.doi.org/10.1080/09638180701265820>.

[24] Htay, N., (2012). The impact of corporate governance on the voluntary accounting information disclosure in Malaysian listed banks. Global Review of Accounting & Finance, 3(2): 128-142.

[25] Sweiti, I., and Attaya, O. (2013). Critical factors influencing voluntary disclosure: the Palestine exchange "PEX." Global Journal of Management and Business Research Finance, Vol. 13 Issue. 6.

[26] Ibrahim, A. and Hanefah, M. (2016). Board Diversity and Corporate Social Responsibility in Jordan. Journal of Financial Reporting and Accounting, 14(2), 279-298.

[27] Sundarasen, S. D., Je-Yen, T., and Rajangam, N. (2016). Board Composition and Corporate Social Responsibility in an Emerging

[28] Alareeni, B , Lulu, M. (2017). The Voluntary Disclosure of Companies Listed on Palestine Exchange and Its Effect on Stock Price.

[29] Barakat, F., Pe´rez, V., and Ariza, R., (2015). Corporate social responsibility disclosure (CSRD) determinants of listed companies in Palestine (PXE) and Jordan (ASE). Springer-Verlag Berlin Heidelberg.

[30] Alkababji, M. (2014). Voluntary disclosure on corporate social responsibility: a study on the annual reports of Palestinian corporations. European Journal of Accounting Auditing and Finance Research, Vol.2, No.4, pp.59-82.

[31] Verrecchia, R., (1983). Discretionary disclosure. Journal of Accounting and Economics, Vol. 5, 179- 194.

[32] Choi, F.D.S. (1973). Financial disclosure and entry to the European capital market, Journal of Accounting Research, 11(2), pp. 159–175. <http://dx.doi.org/10.2307/2490187>.

[33] Wilmshurst, T. D., and Frost, G. R. (2000). Corporate environmental reporting: a test of legitimacy theory. Accounting, Auditing and Accountability Journal. 13(1), 10- 26.

[34] Fama, E., and Jensen, M., (1983). Separation of ownership and control. The Journal of Law and Economics, 26(2), 36–67. <http://dx.doi.org/10.1086/467037>.

[35] Laksmana, I. (2008). Corporate board governance and voluntary disclosure of executive compensation practices. Contemporary Accounting Research, Vol. 25 No. 4, pp. 47–82.

[36] Chen, P., and Jaggi, B., (2000). Association between independent non-executive directors, family control and financial disclosures in Hong Kong. Journal of Accounting and Public Policy, 19(4), 285–310. <http://dx.doi.org/10.1016/S0278-4254(00)00015-6>.

[37] Abu Alia, M. J., & Mardawi, Z. M. (2021). The Impact of Ownership Structure and Board Characteristics on Corporate Social Responsibility Disclosed by Palestinian Companies. Jordan Journal of Business Administration, 17(2), 254-277.

[38] Dixon, R., Guariglia, A., and Vijayakumaran, R. (2015). Managerial ownership, corporate governance and firms' exporting decisions: Evidence from Chinese listed companies. The European Journal of Finance, (ahead-of-print), 1-39.

[39] Lim, S. Matolcsy, Z. and Chow, D. (2007). The association between board composition and different types of voluntary disclosure. European Accounting Review, Vol. 16 No. 3, pp. 555-583.

[40] Forker, J. (1992). Corporate governance and disclosure quality. Accounting and Business Research, Vol. 22 No. 86, pp. 111-124

[41] Mardawi, Z., Seguí-Mas, E., & Tormo-Carbó, G. (2021). Rethinking the accounting ethics education research in the post-COVID-19 context. Cogent Business & Management, 8(1), 1984627.

[42] Singh, V., Vinnicombe, S., and Johnson, P. (2001). Women directors on top UK boards. Corporate Governance. An International Review, 9, 206–216. http://dx.doi.org/10.1111/1467-8683.00248.

[43] Gibbins, M., Richardson, A., and Waterhouse, J. (1990). The management of corporate financial disclosure: Opportunism, ritualism, policies, and process. Journal of Accounting Research, 28(1), 121–143. <http://dx.doi.org/10.2307/2491219>.

[44] Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. Financial review, 38(1), 33-53.

[45] Hillman, A. J., Shropshire, C., & Cannella Jr, A. A. (2007). Organizational predictors of women on corporate boards. Academy of management journal, 50(4), 941-952.

[46] Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. Journal of business ethics, 97, 207-221.

[47] Majeed, S., Aziz, T. and Saleem, S. (2015), “The effect of corporate governance elements on corporate social responsibility (CSR) disclosure: empirical evidence from listed companies at KSE Pakistan”, International Journal of Financial Studies, Vol. 3 No. 4, pp. 530-556, doi: 10.3390/ijfs3040530.

[48] Handajani, L., Subroto, B., Sutrisno, T. and Saraswati E. (2014). Does Board Diversity Matter on Corporate Social Disclosure? An Indonesian Evidence. Journal of Economics and Sustainable Development, 5(9), 170-222.

[49] Alfraih, M., Almutawa, A., (2017). Voluntary disclosure and corporate governance: empirical evidence from Kuwait. International Journal of Law and Management, 59 (2), 217-236. <https://doi.org/10.1108/IJLMA-10-2015-0052>.

[50] Uyar, A., Kilic, M., and Bayyurt, N., (2013). Association between firm characteristics and corporate voluntary disclosure: Evidence from Turkish listed companies. Intangible Capital, 9(4), 1080-1112

[51] Sukthomya, D. (2011). The empirical evidence of voluntary disclosure in the annual reports of listed companies: The case of Thailand (Doctoral dissertation). Nottingham University, United Kingdom.

[52] Cooke, T.E. (1989). Disclosure in the corporate annual reports of Swedish companies. Accounting and Business Research, Vol. 19 No. 74.

[53] Dwekat, A., Mardawi, Z., & Abdeljawad, I. (2018). Corporate governance and auditor quality choice: Evidence from Palestinian corporations. International Journal of Economics and Financial Issues, 8(2), 47-53.

[54] Omran, M. S., Zaid, M. A., & Dwekat, A. (2021). The relationship between integrated reporting and corporate environmental performance: A green trial. Corporate Social Responsibility and Environmental Management, 28(1), 427-445

[55] Elfeky, M. and Nasiri, A. (2017). The Determinants of Voluntary Disclosure in Emerging Markets: The Case of Egypt. Journal of Poverty, Vol.36.

[56] Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. Journal of Marketing theory and Practice, 19(2), 139-152.‏

[57] Dwekat, A., Seguí-Mas, E., & Tormo-Carbó, G. (2020b). The effect of the board on corporate social responsibility: bibliometric and social network analysis. Economic research-Ekonomska istraživanja, 33(1), 3580-3603.

[58] Eng, L., and Mak, Y. (2003). Corporate governance and voluntary disclosure. Journal of Accounting and Public Policy, 22(4), 325–345. <http://dx.doi.org/10.1016/S0278-4254(03)00037-1>.

[59] Cucari, N., Esposito de Falco, S., & Orlando, B. (2018). Diversity of board of directors and environmental social governance: Evidence from Italian listed companies. Corporate Social Responsibility and Environmental Management, 25(3), 250-266.

[60] Muttakin, M.B., Khan, A. and Mihret, D.G. (2018), “The effect of board Capital and CEO power on corporate social responsibility disclosures”, Journal of Business Ethics, Vol. 150 No. 1, pp. 41-56, doi: 10.1007/s10551-016-3105-y.

[61] Kramer, V.W., Konrad, A.M. and Erkut, S. (2006), “Critical mass on corporate boards: Why three or more women enhance governance”, Wellesley Centers for Women Special Report No. WCW11, Wellesley Centers for Women Publications, Wellesley, USA.

[62] Hossain, M. and Hammami, H., (2009). Voluntary disclosure in the annual reports of an emerging country: the case of Qatar. Advances in International Accounting, 25: 255-265.

[63] Mai Jabarin, Abdulnaser Nour and Sameh Atout (2019). Impact of macroeconomic factors and political events on the market index returns at Palestine and Amman Stock Markets (2011–2017). Investment Management and Financial Innovations, 16(4), 156-167. <http://dx.doi.org/10.21511/imfi.16(4).2019.14>

[64] Jalal, G., Alkoni, S., Nour, A.I. (2023). Impact of Board Characteristics on the Corporate Dividends Payout: Evidence from Palestinian Stock Market. In: Alareeni, B., Hamdan, A. (eds) Explore Business, Technology Opportunities and Challenges ‎After the Covid-19 Pandemic. ICBT 2022. Lecture Notes in Networks and Systems, vol 495.pp550-569. Springer, Cham. https://doi.org/10.1007/978-3-031-08954-1\_49

[65] Nour A., Alia M.A., Balout M. (2022) The Impact of Corporate Social Responsibility Disclosure on the Financial Performance of Banks Listed on the PEX and the ASE. In: Musleh Al-Sartawi A.M.A. (eds) Artificial Intelligence for Sustainable Finance and Sustainable Technology. ICGER 2021. Lecture Notes in Networks and Systems, vol 238. pp 42-5. Springer, Cham. <https://doi.org/10.1007/978-3-030-93464-4_5>

[66]Nour, Abdulnaser; Bouqalieh, Bassam; and Okour, Samer (2022) "The impact of institutional governance mechanisms on the dimensions of the efficiency of intellectual capital and the role of the size of the company in the Jordanian Shareholding industrial companies," An-Najah University Journal for Research - B (Humanities): Vol. 36: Iss. 10, Article 6.Available at: <https://digitalcommons.aaru.edu.jo/anujr_b/vol36/iss10/6>

[67] Anas Al-Bakri, Mohammed Matar, Abdul Naser I Nour, The required information and financial statements disclosure in SMEs, Journal of Finance and Accountancy, Volume 16 – September, 2014,PP 1-15,Academic and Business Research Institute (AABRI).